

**BOWIEA GARIEPENSIS: A NEW BOWIEA SPECIES (LILIACEAE)
FROM THE NORTH WESTERN CAPE**

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ABSTRACT

A new *Bowiea* species (Liliaceae) is described from the north western Cape (R.S.A.)

UITTREKSEL

BOWIEA GARIEPENSIS: 'N NUWE BOWIEA-SOORT VANAF NOORDWES-
KAAP

'n Nuwe *Bowiea*-soort (Liliaceae) vanaf Noordwes-Kaap (R.S.A.) word beskryf.

Key words: *Bowiea*, sp. nov., Liliaceae, north western Cape.

Bowiea gariensis E.J. van Jaarsveld, sp. nov.; differt ab *Bowiea volubilis* Harv. quia habet prostratos ad pendulos et glaucos caules, qui ferunt conspicuos et albos flores 25 mm diametris, stigmatibus 4,5 mm longis.

Type: Cape Province—2919 (Pofadder): Upper south slope of Groot Pellaberg (-AA), van Jaarsveld 6650 (NBG, holotype; PRE, isotype).

Geophyte, glabrous in all parts. *Roots* fleshy, white, up to 5 mm in diameter. *Bulb* globose, depressed, 60–140 mm in diameter, subterranean or somewhat exposed, the exposed part green, often forming 2–3 bulblets; tunics thick (up to 8 mm) and fleshy; outer tunics withered, grey and membranous, completely covering the bulb. *Leaves* appearing before the inflorescence, lanceolate, canaliculate up to 25 mm long and 10 mm wide, striate, withering shortly prior to flowering. *Stem* (inflorescence) annual, pendulous and scrambling, much-branched, basally flexuose, up to 1.2 m long, softly succulent, glaucous; branchlets subulate, 20–70 mm long, 2,5–5 mm in diameter; bracts lanceolate, spurred, 3–5 mm long, about 2 mm wide at the base; pedicels arched, 25–70 mm long. *Flowers* opening diurnally, relatively few, scented. *Perianth* 25 mm in diameter, divided to the base, segments

patent, oblong to lanceolate, 12 mm long, 3.5 mm broad with a medium green stripe, margins revolute towards the base; apex subacute, each perianth lasting approximately 8–10 days. *Stamens* suberect, about 5 mm long. *Ovary* broadly conical, 5 mm in diameter at the base, light green. *Style* terete with a 3-lobed stigma.

Flowering period: March to June.

DISTRIBUTION AND HABITAT

Bowiea gariensis occurs in Namaqualand Broken Veld (Acocks Veld type no. 33) in the lower Orange River valley in Namibia and South Africa, from Helskloof (Richtersveld) in the west to Pellaberg in the east.

The plants are procumbent and pendulous among rocks and occur mainly on south-facing slopes, being in shade for most of the day. The stems tend to sprawl, often cascading over the rocks. The plants are locally abundant. Rainfall is mainly in autumn and winter and ranges from 50–200 mm per annum.

DISCUSSION

Bowiea gariensis is a distinct species of the winter rainfall region of the north western Cape. The glaucous pendulous stems with the conspicuous white, larger corolla, and the spreading segments, clearly separate it from the only other member of the genus in South Africa, *Bowiea volubilis* Harv. The active growing season of *Bowiea gariensis* is from April to September, and the plant becomes deciduous towards the summer. In contrast, *Bowiea volubilis*, which occurs in the central and eastern parts of South Africa, grows during the summer months. The latter species has bright green branches and an inconspicuous green corolla with distinctly reflexed segments. In addition, the bulb of *Bowiea gariensis* is covered with grey membranous sheaths which are lacking in *Bowiea volubilis*.

SPECIMENS EXAMINED

CAPE—2817 (Vioolsdrif): Northern base of Little Helskloof (—CB), *Wisura* 1462 (NBG 1035/70).

—2819 (Ariamsvlei): Pelladrift (—CC), *Dinter* 5795 (SAM); Warmbad (—BD), *Range* 696 (SAM).

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FIG. 1.
Bowiea gariensis van Jaarsveld, sp. nov.

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